

## REMARKS

### Amendments to the Claims

Claim 18 has been amended so that it is consistent with claim 1.

### Claim Rejections Based on Non-Statutory Obviousness-Type Double Patenting

The provisional rejection of claims 1-28 on grounds of non-statutory obviousness-type double patenting is acknowledged by Applicant and Applicant elects to defer submittal of a terminal disclaimer pending an indication of allowable subject matter in this application.

### Claim Rejections Under 35 USC §102(b)

The rejection of claims 1, 10 and 12-19 as anticipated by U.S. 6,380,547 (Gonzalez) appears to be based upon an interpretation of the reference patent to the extent that the examiner believes that the patent discloses a composition for forming a coding comprising at least one pair of mutually associated luminescent substances, wherein the pair of luminescent substances emit in a joint emission range with their spectra overlapping in at least a sub range of the joint emission range such that the emission spectrum of the first luminescent substance is complemented characteristically by the emission spectrum of the second luminescent substance to define an envelope of luminescence emissions usable as a coding.

A careful reading of Gonzalez reveals that the invention therein disclosed is a tagging composition wherein individual laser luminophores are applied to a substrate and, when exposed to an excitation laser light of predetermined wavelength will individually be excited within their predetermined wavelengths to reveal a spectral signature that can be used as a tag for an article to which the substrate is applied.

It is important to note that the individual luminophores display distinguishable fluorescent peaks that can be used to designate different codes or information (see column 2, lines 44-67). Each luminophore, when excited, is detected by appropriate signal processing equipment to identify the spectral signature of the luminophores as it emits its respective fluorescence spectra (see column 4, lines 25-28).

There is no disclosure contained within Gonzalez of exciting a plurality of luminophores that luminesce in sub ranges overlapping each other to produce a joint emission range wherein the emission spectrum of one luminescent substance is complemented

characteristically by the emission spectrum of a second luminescent substance to thereby define an envelope of luminescent emissions that is usable as a coding.

In accordance with Gonzalez, the tagging composition is arranged to fluoresce at a given peak that can be detected by itself or in combination with other peaks of other luminophores having a different spectra. An analogy could be made by regarding the individual luminophores as primary additive light sources that can be turned on by laser excitation energy wherein the light sources display red, green and blue colors. In accordance with the teachings of Gonzalez, detection is only made of the individual red, green and blue colors such as red, blue, green, as well as combinations of the colors, such as red and blue, red and green, etc. At no point are two of the colors blended together and detected in the form of their complementary colors such as yellow, cyan, magenta, etc.

The present invention is not based on the principle of detecting individual spectral peaks within given ranges, but rather detecting an envelope of luminescent emissions formed by two complementary emissions which is usable as a coding without particular regard to the individual luminescence spectra contributing to the envelope. Indeed, the invention uses this principle to obtain a highly secure coding.

Thus, Gonzalez fails to show, teach or describe the essence of the invention recited in claim 1 and in fact lacks any teaching of an essential element recited in the claim.

Applicant respectfully submits that no reasonable interpretation of the teachings of Gonzalez reveals a composition for forming a coding using joint emission spectra of at least two luminescent substances wherein the joint emission spectra constitute individual spectra that complement each other to define an envelope of luminescence emission wherein the envelope is usable as a coding.

This is an important distinction constituting novelty over Gonzalez because it provides a high quality and high security coding in which the spectral resolution of the mutually complementary luminescence emissions can only be obtained with great technical effort (see paragraph 005 of the written description). The invention further provides the advantage that first and second luminescent substances may have a sub range wherein the peaks of the emission spectra are located only a small distance apart which renders detection of the coding even more difficult (see paragraphs 0015 and 0018).

Clearly, the tagging compositions and methods disclosed in Gonzalez are not intended to make use of pairs of luminescent substances that emit in joint emission ranges that complement each other to define an envelope of emissions usable as a coding, as recited in

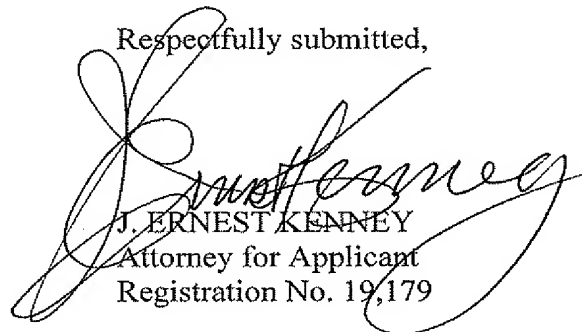
claim 1. Accordingly, withdrawal of the rejection of claims 1, 10 and 12-19 under 35 USC §102 is warranted and the same is respectfully requested.

Claim Rejections – 35 USC §103(a)

With regard to the rejection of claims 2, 11 and 20-22, withdrawal of the rejection of these claims as reciting subject matter regarded to be obvious in view of the Gonzalez patent is warranted for the same reasons given above and the same is respectfully requested. Specifically, a *prima facie* case of obviousness cannot be established on the basis of Gonzalez, which fails to show, teach or remotely suggest a composition for forming a coding comprising at least two luminescent substances which emit in a joint emission range and wherein their emission spectra overlap in at least a sub range such that the emission spectrum of the first luminescent substance is complemented characteristically by the emission spectrum of the second luminescent substance to thereby define an envelope of luminescence emissions usable as a coding. As noted above, the fluorescence peaks of the luminophores of Gonzalez are detected individually or in combination with each other, but not jointly in the form of an envelope of luminescence emissions as recited in claims 2, 11 and 20-22.

Applicant submits that, upon further consideration, the shortcomings of Gonzalez will be observed and a determination will follow that the claims as currently presented recite new and unobvious subject matter.

BACON & THOMAS, PLLC  
625 Slaters Lane, 4<sup>th</sup> Floor  
Alexandria, VA 22314-1176  
Phone: (703) 683-0500  
Facsimile: (703) 683-1080  
Date: November 30, 2009

Respectfully submitted,  
  
J. ERNEST KENNEY  
Attorney for Applicant  
Registration No. 19,179